NO. 65.

July 1 to 31, 1911.

NEW PLANT IMMIGRANTS.

ACANTHOSICYOS HORRIDA. (Cucurbitaceae.) 31401. Seeds of the narras from Walfisch Bay, West Africa. Presented by Mr. Richard Hörnig, Tsumeb, German Southwest Africa. "This plant is an important dune former and continues to grow with the increasing height of the dune, so that its younger shoots remain at the surface, forming a dense thorny shrub, while the root system penetrates to a considerable depth, tapping the underground water and securing such a supply that drops exude and fall from the cut ends of assimilating stems. Flowering commences in November, and by the middle of February the female plants produce ripe fruits, which are borne in great profusion, and for about four months in the year render the Hottentots independent of other sources of food, and to a large extent, of water also. The fruits are spheroidal in shape, and about nine inches in diameter. The juicy yellow flesh is much relished by the natives, who consume large quantities of it while fresh and lay by a store for winter use in the form of hard flat cakes obtained by evaporation, and its food value is attested by their fat and sleek appearance during the narras season. The faculty of enjoying the juice evidently has to be acquired, for it has a sweet sickly flavor, and contains an acid principle very irritating to the tongue and palate of those unaccustomed to it; it is said that at the end of the narras season the lips of even the habitual consumers are swollen and inflamed. The seeds, which somewhat resemble those of the squash, are very nutritious and were formerly exported to Cape Town under the name of 'butter nuts', where they found a market among the native population and were also used by Europeans as a substitute for sweet almonds." (Pearson, Notes on a Journey from Walfish Bay to Windhuk, Kew Bull. Misc. Inf. 9:342 (1907.) For distribution later.

ANONA MURICATA. (Anonaceae.) 31383. Seeds from Piracicaba, Brazil. Presented by Mr. Clinton D. Smith, Fazenda Modelo do Estado de Sao Paulo. "Variety Cabeca de Negro. This seems to me to belong to this species and variety. There are so many variations in the trees and in the fruits that I cannot as yet clearly determine the lines of separation. The natives call this fruit 'araticu'." (Smith.) For distribution later.

BRASSICA SP. (Brassicaceae.) 31476. Seeds of Chinese cabbage from China, presented by Mr. G. Weidmann Groff,

Canton Christian College, Canton, China. "Wong nga paak. An excellent Chinese cabbage with very long head, and when blanched, of excellent flavor." (Grcff.) For distribution later.

CAPSICUM SP. (Solanaceae.) 31297. Seeds of a pepper from Paraguay. Presented by Mr. C. F. Mead, Villa Encarnacion. "Called in Guarany, 'Kucii'. A very small and very strong pepper, a good rival if not stronger than the Tabasco pepper. Found growing wild in the forests of Paraguay. The seeds were procured for me by Indians near the yerbales of Alta Parana." (Mead.) For distribution later.

CASIMIROA EDULIS. (Rutaceae.) 31470. Seeds of the Matasano or white sapote from Honduras. Presented by Dr. R. Fritzgartner, Tegucigalpa. "The tree is handsome, having large, palmate leaves, glossy green on the upper surface, and with age forms a dense dome-shaped head of foliage. As an ornamental alone it is of value, and possesses good possibilities as a street and avenue tree. The fruits greatly resemble in appearance an apple or a quince, and the better varieties are as large as a good-sized apple. When fully ripe the pulp becomes quite soft, and has been described as of a delicious, melting, peach-like flavor. The normal season of ripening is October and November, but as soon as the fruit is fully developed it may be picked and ripened in the house, and is then quite as good as though ripened on the tree." (F. W. Popenoe, Pomona journal Economic Botany, 1, p. 83-90, 1911.) For distribution later. See halftone plate.

CASTILLA SP. (Urticaceae.) 31410. Seeds of a Central American rubber tree from Tula, Veracruz, Mexico. Presented by Mr. A. D. Patchen. One of the seven or eight trees of this genus capable of producing rubber. Introduced for the work of the Office in encouraging the growing of the various rubber trees in Porto Rico, Hawaii, and the Canal Zone. For distribution later.

CEIBA PENTANDRA. (Malvaceae.) 31393. Seeds of West Indian silk-cotton tree from Buitenzorg, Java. Presented by the Director of Agriculture. "A tree attaining a height of 100 feet or more, having an imposing appearance. Its bark is green and covered with rough tuberculated prickles. It tapers upward from a swollen base, around which are thick projecting buttresses of sufficient width to allow of horses being stalled between them." (Smith, Dictionary of popular names of economic plants.) "The fiber surrounding the seeds of this and related species is the 'kapok' of commerce, and is

exported in considerable quantities from the west coast of Africa." (Cook and Collins, Economic plants of Porto Rico.) For distribution later.

CHRYSANTHEMUM CINERARIFOLIUM. (Asteraceae.) 31466. Seeds of pyrethrum from Erfurt, Germany. Purchased from Haage & Schmidt. Introduced for the work of the Office of Drug Plant Investigations in growing in the United States the various species of this genus which produce the pyrethrum insect powder. For distribution later.

CITRUS SPP. (Rutaceae.) 31406-409. Seeds of citrus fruits from Buitenzorg, Java. Presented by Mr. H. Wigman, Jr., assistant Director, Botanical Garden, Buitenzorg. Citrus aurantium, var.?, two varieties of C. decumana, and C. nobilis. For distribution later.

DIOSCOREA SP. (Dioscoreaceae.) 30091. Tubers of a yampie from Kingston, Jamaica. Presented by Mr. William Harris, Superintendent of Public Gardens. "Tubers mostly of fair size, but generally rather rough and irregular in form. The flesh is very white and of good flavor when cooked, resembling somewnat the white fleshed yampie of the Canal Zone(Plant Introduction No. 29540.) (R. A. Young.) For distribution later.

FICUS PSEUDOCARICA. (Urticaceae.) 31469. Seeds of a fig from Eritrea, East Africa. Presented by Prof. T. Batorate, Director, Colonial Agricultural Experiment Station, Asmara. "We already have this species in California and it promises to be important in supplying early Blastophaga with pollen to caprify the spring crop of figs." (W. T. Swingle.) For distribution later.

MAURITIA SP. (Phoenicaceae.) 31468. Seeds of morichy from La Brea, Trinidad, British West Indies. Presented by Mr. H. Caracciolo, St. Joseph Nurseries. "A handsome palm growing about the asphalt beds of La Brea. The seeds ripen in May and could readily be gathered as the palm is abundant locally." (Oglesby Paul.) For distribution later.

MEDICAGO SPP. (Fabaceae.) 30992, 30994-31007, 31009-019, 31021-024, 31069. Seeds of thirty-one species and varieties cf Medicago from St. Petersburg Botanic Garden. Presented by the Director. Among these are a number of varieties of Medicago hispida, Medicago falcata, M. lupulina, and several of the numerous Mediterranean forms. All for distribution later.

MEDICAGO LUPULINA. (Fabaceae.) 31395. Seeds of black medick from Foochow, China. Presented by Mr. T. M. Wilkinson. "A plant with low growing stems, inclined to lie along the ground and take root at the joints. Starts in new places like white clover. Leaf about the size of white clover. Blossom yellow." (Wilkinson.) For distribution later.

MEDICAGO SP. (Fabaceae.) 31467. Seeds of alfalfa from Quetta, India. Secured by Mr. F. Booth Tucker, The Salvation Army, Simla, India, from Mr. G. H. Frost, Sub-conductor, Office of Military Farm, Quetta. For distribution later.

MEDICAGO SP. (Fabaceae.) 31465. Seeds of alfalfa from Jeolikote, United Provinces, India. Presented by Mr. Norman Gill, Superintendent, Kumaun Government Gardens, Douglas Dale, at the request of Rev. N. L. Rockey, Gonda, United Provinces. For distribution later.

MECONOPSIS SIMPLICIFOLIA. (Papaveraceae.) 31025. Seeds from St. Petersburg Botanical Garden. Presented by the Director. "A perennial herb with large blue-purple flowers found on the subalpine slopes of the Himalayas at an elevation of 12000 to 14000 feet, in Nepal and Sikkim in northern India." (Skeels.) Introduced with others of the genus for trial, in the hope of finding a thoroughly hardy blue poppy, and also for possible use in breeding work with the hardier poppies already in cultivation. For distribution later.

PERSEA AMERICANA. (Lauraceae.) 31381. Seeds of avocado from Mexico. Secured on the market at Laredo, Texas, by Mr. David Griffiths, of this Bureau. "A Mexican avocado. Only one of the kind found. Brown-black in color. The outer skin, hard, rather brittle, and easily peeled off from the edible flesh. Flavor good, flesh firm." (Griffiths.) For distribution later.

PHELLODENDRON SACHALINENSE. (Rutaceae.) 30864. Seeds from Sapporo, Japan, Presented by Prof. T. Minami, Botanic Garden. "Of the three species of this genus established in the Arboretum, Phellodendron sachalinense is the handsomest. All the species are natives of eastern Asia, and are small trees with pinnate leaves, small clusters of inconspicuous yellow flowers, the male and female flowers being produced on different individuals, and black berry-like fruits; they have bright yellow wood and roots, and all parts of these trees are permeated with a fragrant aromatic oil which apparently makes them immune from the attacks of insects. P. sachalinense, which is a native of Saghalin and the northern island of Japan, has grown in the Arboretum into a tree about thirty

feet high, with a tall, straight trunk, and wide spreading branches, forming a shapely flat-topped head. The seedlings, springing up naturally near the old trees, indicate that it is likely to hold its own in New England. The hardiness of this tree, its rapid growth, and the fact that it is not injured by insects, suggest that this is a good subject to plant in narrow streets. Seeds will be sent from the Arboretum in the autumn to anyone who may desire to grow this tree." (Bulletin of Popular Information, No. 7, Arnold Arboretum, Harvard University.) For distribution later.

XANTHOSOMA SP. (Araceae.) 31371. Tubers of yautia from Monte Cristi, Dominican Republic. Procured by Mr. Frederic L. Lewton of this Bureau. "The tubers were obtained by Mr. Lewton on the market under the name of yautia. They are oblong in form, one specimen being six inches in length and two and a quarter inches in greatest diameter, with a weight of ten ounces. The sprouts are pink or reddish. The flesh is white and non-acrid; when cooked it becomes slightly purplish and is moderately firm. The flavor is rather inferior." (R. A. Young.) For distribution later.

XANTHOSOMA SP. (Araceae.) Tubers of yautia from Port-au-Prince, Haiti. Procured by Mr. Frederick L. Lewton of this Bureau. "The tubers of this variety were obtained on the market, under the name of 'Malanga', by Mr. Lewton. They are roundish in general form, some specimens being about two and one half by three inches in size and weighing five to six ounces. The sprouts are reddish in color. The flesh is acrid when raw, but this is destroyed by boiling for 35 or 40 minutes. The flesh is very firm when cooked and is of fair flavor." (R. A. Young.) For distribution later.

NOTES FROM FOREIGN CORRESPONDENTS.

CUBA. Cienfuegos. Mr. Robert M. Grey, Superintendent of the Harvard Botanical Station, writes July 18, that he has secured for us more of the Animas Malangas, which he will send after they have fully matured. There are two varieties, one the common "malanga", the other very nearly like the Trinidad dasheen.

PHILIPPINE ISLANDS. Mr. C. V. Piper writes June 22, that he is sailing July 5 on the Mongolia for Hongkong, Canton, Singapore, and Java. He is sending a considerable number of seeds of forage crops and grasses.

RECENT CALLERS.

Prof. W. R. Lazenby of Ohio State University called en route to Brazil, Paraguay and Argentina, where he will spend the winter. While in these countries he will also collect such information and specimens for this Office as he can without interfering with his own plans. Requests for investigations along special lines and collections of special materials may be made through this Office.

Messrs. V. Kotchetkoff of the Department of Agriculture, Moscow, and D. Roodzinski, Director of the Selection Station of the Moscow Agricultural Institute, spent several days recently in a study of the work of this Bureau and especially of the work of Arlington Farm as an introduction to a six months' investigation of agricultural methods and conditions in the United States.

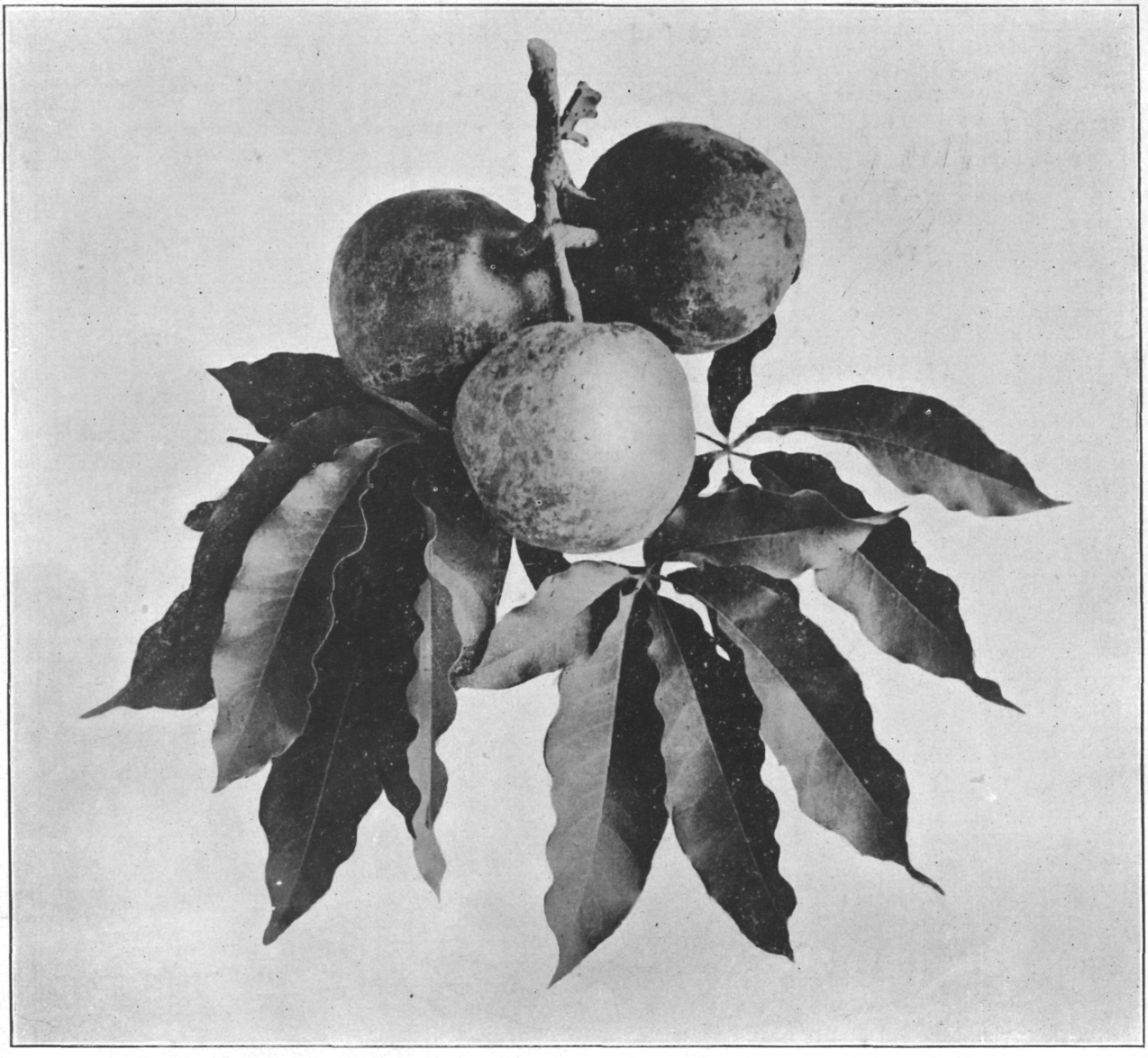
Mr. G. Weidman Groff of Canton Christian College, called July 10, to report on a recent trip he made across one of the less known provinces of southern China, that of Kwong Si. Many interesting fruits and vegetables were reported, and notes given us on the various crops grown. Much information was received on the general agricultural conditions of the southern provinces, where there seems to be a promise of a general movement in advance along agricultural lines.

Mr. William W. Masterson, American Consul at Harput, Turkey in Asia, in conversation July 10, called attention to several interesting fruits of that portion of Armenia and gave us the names of a number of new men recommended as possible correspondents. Among the interesting importations sent us by Consul Masterson in the past are the oleasters, or Trebizond dates, watermelons of tremendous size, and unusually fine apricots.

Issued September 12, 1911.

CASIMIROA EDULIS.

WHITE SAPOTA.



This hitherto almost neglected subtropical tree, with greenish-yellow fruit sometimes 3 inches in diameter, is well adapted to southern California and southern Florida, and possibly will succeed in protected areas in southern Texas and Louisiana. The pulp has a rich subacid taste and is most palatable when somewhat overripe. The thick skin will probably make long shipments possible. The tree is said not to root well from cuttings but to grow well from seeds. Trees in southern California have attained the age of 80 years and though neglected have borne fruit regularly for years. The illustration shown is one-half natural size.